

A REVISION OF THE MT. DESERT HEPATIC LIST.

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MT. DESERT is popularly regarded as a mountainous island, whereas it is really a low, glacial-drifted region slashed across by the granite range of Lafayette National Park. It is difficult to describe Mt. Desert to anyone unfamiliar with its delights without being suspected of membership in the Bar Harbor Board of Trade.

As a matter of fact, the hepatic flora is anything but exciting, being north German rather than alpine. Furthermore, the mountains have been so burned over, except for a few places, that the original moss-covering is gone.

For more details of topography, geology, etc., the reader is referred to Rand and Redfield's Mt. Desert Flora. The original hepatic list, determined by Underwood, contained 49 species, and, on recent examination of the collection, although there were a few withdrawals, the number remained the same, between modern segregations and overlooked admixtures. Three of these were new to Maine, including *Diplophyllum albicans*, its only New England station, although abundant in the island. The others were *Calypogeia fissa* and *Scapania paludosa*.¹

The writer has had four seasons' investigation there, and has brought the list up to 97, including five more new to Maine, one, *Lejeunea patens*,² being likewise new at that time to New England. The others were *Lunularia cruciata*, *Calypogeia sphagnicola*, *C. Sullivantii*, and *Radula obconica*.³

Of the many more species presumably resident upon the island, the majority are to be sought within the western part, as that has been less thoroughly explored.

The writer wishes to thank Mr. Rand, who kindly let her take the hepatic collection home for leisurely study. Miss Shaw and Prof. W. R. Taylor have also contributed specimens. Further material will be most gratefully received from anyone visiting the island.

¹ RHODORA, vol. 23, p. 284, Dec. 1921.

² RHODORA, vol. 25, p. 97, June 1923.

³ RHODORA, vol. 21, p. 169, Sept. 1919; vol. 23, p. 284, Dec. 1921.

RICCIACEAE.

RICCIA SULLIVANTII Aust. Clayey roadsides, Young's District; Great Pond; road toward Prettymarsh (L.).

REBOULIACEAE.

ASTERELLA TENELLA (L.) Beauv. Clayey roadside near Indian Point (L.).

MARCHANTIACEAE.

CONOCEPHALUM CONICUM (L.) Dumort. On damp ground, common. Aunt Molly's Beach (Rand); Bar Harbor (Miss Furbish); Cadillac Cliff (L.).

LUNULARIA CRUCIATA (L.) Dumort. Mt. Desert Nurseries' greenhouse, Bar Harbor (L.).

MARCHANTIA POLYMORPHA L. On the ground, frequent. Beech Hill; High Head; Somesville and elsewhere (Rand); near Anemone Cave (L.).

RICCARDIACEAE.

METZGERIA FURCATA (L.) Dumort. Ledges, Newport Mt., Pemetic (L.).

PALLAVICINIA FLOTOWIANA (Nees) Lindb. In *Thuja* swamp, Canada Brook, south of Appalachian Mountain Club camp (L.).

P. LYELLII (Hook.) S. F. Gray. Sunken Heath Brook (Rand); Canada Brook (L.).

RICCARDIA LATIFRONS Lindb. Roberts' Meadow, Bar Harbor (L.); Great Cranberry Heath (L.).

R. MULTIFIDA (L.) S. F. Gray. Wet rocks, infrequent. Green Mt. Gorge; Stanley Brook (L.).

R. PALMATA (Hedw.) Carruth. Peaty ground, old logs, infrequent. Baker's I. (L.); Stanley Brook (Rand, as *Aneura palmata*).

R. PINGUIS (L.) S. F. Gray. Upper Hadlock Pond (L.); Bass Harbor (W. R. Taylor).

PELLIACEAE.

BLASIA PUSILLA L. Seal Cove road, Southwest Harbor (W. R. Taylor).

FOSSOMBRONIA FOVEOLATA Lindb. Pond shores and roadsides, common. Jordan Pond; Ripples Pond; Great Pond (Rand, as *F. Dumortieri*); Canada Brook; Bubbles Pond (L.); Manset (Taylor).

PELLIA EPIPHYLLA (L.) Corda. On damp ground, common.

LOPHOZIACEAE.

CHILOSCYPHUS FRAGILIS (Roth) Schiffn. Southern end of Great Pond (Rand, as *C. polyanthos*). On dripping rocks, northern end of Beech Mt. (Rand, as *C. polyanthos* var. *rivularis*); Hunter Brook (L.); Southwest Harbor (Taylor).

C. PALLESCENS (Ehrh.) Dumort. On damp ground. Spring on Spring trail, Jordan Mt. (L.).

C. RIVULARIS (Schrad.) Loeske. Stanley Brook (L.).

GEOCALYX GRAVEOLENS (Schrad.) Nees. On logs and rocks. Beech Mt. (Rand); Jordan Pond path (L.). Common.

JAMESONIELLA AUTUMNALIS (DC.) Steph. Common on logs and rocks. Listed as *J. Schraderi*. Somes Pond (Rand, as *Jungermannia pumila*).

JUNGERMANNIA LANCEOLATA L. Spring trail, Jordan Mt. (L.).

J. PUMILA With. Stanley Brook, Jordan Stream (L.).

LOPHOCOLEA HETEROPHYLLA (Schrad.) Dumort. On ground and old logs. Head of Great Pond (Rand, as *L. bidentata*); Jordan Pond path (L.); near Ripples Pond (Rand); Islesford (L.).

LOPHOZIA ALPESTRIS (Schleich.) Evans. Sargent Mt.; Baker's I. (L.).

L. ATTENUATA (Mart.) Dumort. Common on logs and rocks. Beech Mt.; Cranberry Heath (Rand, as *L. excisa*); Sargent Mt. (L.).

L. BARBATA (Schreb.) Dumort. On rocks, Western Mt. (Rand, as *Jungermannia barbata*); Bar Harbor; Brown's Mt. Notch (L.).

L. BICRENATA (Schmid.) Dumort. Roadside near Asticou; Upper Hadlock Pond (L.).

L. CONFERTIFOLIA Schiffn. Great Head; Otter Cliffs; ledges on Cliff Drive, Seal Harbor (L.).

L. INCISA (Schrad.) Dumort. Old logs and peaty soil. Baker's I. Hunter Brook; Ocean Drive (L.); Great Pond (Rand, as *Jungermannia incisa*).

L. INFLATA (Huds.) M. A. Howe. On ground and rocks (listed as *Jungermannia inflata* by Rand), too common; variable. Brown's

Mt. (Rand); Beech Mt. (Rand); Sargent Mt. (Rand); Robinson Mt. (E. Faxon); Ocean Drive (L.).

L. KUNZEANA (Huben) Evans. In bog-holes with *L. inflata*, etc. Day Mt.; Pemetic; Great Cranberry I., near Club House (L.).

L. LONGIDENS (Lindb.) Macoun. On rocks and old logs. Ledges near Ocean Drive; Giant's Slide; south end of Beech Mt. (L.).

L. LONGIFLORA (Nees) Schiffn. On sphagnum in boggy places. Pemetic; Baker's I. (L.).

L. MARCHICA (Nees) Steph. On *Sphagnum Russowii*, Beech Mt. (Rand, as *Jungermannia marchica*). Spec. in herb. C. Warnstorf. Specimen not seen.

L. PORPHYROLEUCA (Nees) Schiffn. On old logs. Jordan Pond path; Baker's I. (L.).

L. VENTRICOSA (Dicks.) Dumort. On ground and rocks. Beech Mt. (Rand, as *Jungermannia ventricosa*); Hunter Brook (L.).

MARSUPELLA AQUATICA (Lindenb.) Schiffn. Rocks in Deer Brook, Western Mt. (Rand, as *M. emarginata*.)

M. EMARGINATA (Ehrh.) Dumort. Wet rocks, frequent.

M. SULLIVANTII (De Not.) Evans. Damp rocks, Green Mt. (D. C. Eaton, E. Faxon, as *M. adusta*); Beech Cliff (Rand); Anemone Cave (L.).

MYLIA ANOMALA (Hook.) S. F. Gray. Among sphagnum, Freeman Heath (E. Faxon); Aunt Betty's Pond (Rand, as *M. Taylori*); Roberts' Meadow; Great Cranberry Heath (L.).

NARDIA CRENULATA (Sm.) Lindb. Roadsides, Ocean Drive; Great Pond; Upper Hadlock Pond (L.).

N. GEOSCYPHUS (De Not.) Lindb. Clayey roadside, Upper Hadlock Pond (L.).

N. OBSCURA Evans, Hunter Brook, Stanley Brook; Spring on Jordan Mt. trail; Green Mt. Gorge (L.).

PLAGIOCHILA ASPLENIOIDES (L.) Dumort. In wet places, common. Cold Brook; Intervale Brook; northern end of Beech Mt. (Rand); Hunter Brook (L.).

SPHENOLOBUS EXSECTAEFORMIS (Breidl.) Steph. On peaty ground, rocks, etc. Ledges near Ocean Drive; Baker's I. (L.).

S. EXSECTUS (Schmid.) Steph. On old logs and rocks, Seal Harbor; Spring trail to Jordan Mt.; old logs on new Appalachian Mountain Club path (L.).

S. HELLERIANUS (Nees) Steph. On old logs. Head of Green Mt. Gorge; Seal Harbor (L.).

S. MICHAUXII (Web.) Steph. Seal Harbor (E. L. Shaw.)

S. MINUTUS (Crantz) Steph. On rocks. Northern end of Beech Mt. (Rand, as *Diplophyllum Dicksoni*). Giant's Slide; Brown's Mt. Notch (L.).

CEPHALOZIELLACEAE.

CEPHALOZIELLA BIFIDA (Schreb.) Schiffn. On dry ground. Day Mt. (L.).

C. BYSSACEA (Roth) Warnst. Ledges and peaty soil. Robinson Mt. (Faxon); Sargent Drive; Baker's and Big Cranberry Ids. (L.); Sargent Mt. (Rand, as *Cephalozia divaricata*).

C. ELACHISTA (Jack) Schiffn. Roberts' Meadow, Bar Harbor; Cranberry Heath (L.).

C. HAMPEANA (Nees) Schiffn. Seal Harbor; shore of Great Pond (L.).

CEPHALOZIACEAE.

BAZZANIA TRILOBATA (L.) S. F. Gray. Very common in damp woods. Hadlock Upper Pond; Interlaken Brook; Cold Brook; northern foot of Beech Mt. (a slender form, Rand); Brown's Mt. (Redfield).

B. DENUDATA (Torrey) Trevis. On rocks and ledges. Spring trail to Jordan Mt. (L.).

CALYPHOGEIA FISSA (L.) Raddi. On bank, Seal Harbor (Rand, as *Kantia Trichomanis*).

C. NEESIANA (Massal. & Carest.) C. M. Frib. Jordan Pond path on bank (L.).

C. SPHAGNICOLA (Arn. & Perss.) Warnst. & Loeske. On sphagnum. Roberts' Meadow, Cranberry Heath (L.).

C. SUECICA (Arn. & Perss.) K. Müll. On old log, Jordan Pond path (L.).

C. SULLIVANTII Aust. On damp bank, Upper Hadlock Pond (L.).

C. TRICHOMANIS (L.) Corda. On ground and logs, common. Wood road to Western Mt. (Rand, as *Kantia Trichomanis*); Jordan Pond path (L.).

CEPHALOZIA BICUSPIDATA (L.) Dumort. Logs and soil, common. Jordan Pond trail from Northeast Harbor (Rand); Norwood Cove (Rand); Hunter Brook, Great Head, Baker's I. (L.).

C. CATENULATA (Hüben) Spruce. Damp logs. Great Pond (Rand, as *C. virginiana*); Jordan Pond path, near Appalachian Mountain Club camp, Echo Lake.

C. CONNIVENS (Dicks.) Lindb. On peat. Baker's I., Cranberry Heath, Roberts' Meadow (L.).

C. CURVIFOLIA (Dicks.) Dumort. On old logs, Northwest Arm woods (Rand); Jordan Pond path (L.).

C. FLUITANS (Nees) Spruce. Pools in sphagnum, Sunken Heath (Faxon & Rand); Upper Breakneck Pond (L.).

C. MACROSTACHYA Kaal. On sphagnum. Sunken Heath (Rand, as *C. multiflora*); Cranberry Heath (L.).

C. MEDIA Lindb. Old logs, common. Beech Mt. (Rand); Jordan Pond path (L.).

LEPIDOZIA REPTANS (L.) Dumort. Among mosses on logs and rocks. Northern end of Beech Mt.; Norwood Cove (Rand); Jordan Pond path (L.).

L. SETACEA (Web.) Mitt. In sphagnum. Aunt Betty's Pond (Faxon & Rand); Roberts' Meadow; Cranberry Heath (L.).

ODONTOSCHISMA DENUDATUM (Mart.) Dumort. Seal Harbor; Baker's I.; Appalachian Mountain Club camp, on old logs (L.).

O. ELONGATUM (Lindb.) Evans. On damp peaty soil. Bubbles Pond (both ends); Jordan Pond (L.).

PTILIDIACEAE.

BLEPHAROSTOMA TRICHOPHYLLUM (L.) Dumort. On logs and ledges. Stanley Brook (Rand); Jordan Pond path (L.).

PTILIDIUM CILIARE (L.) Nees. Common. Slopes of Green Mt. (D. C. Eaton); Brown's Mt.; Pemetic; Sargent Mt.; Beech Mt.; Dog Mt.; Western Mt.; Great Cranberry Heath (Rand); Baker's I. (L.).

P. PULCHERRIMUM (Web.) Hampe. Very common. Gorge between Triads; Beech Hill; Great Pond road; Otter Cliffs; near Aunt Molly's Beach (Faxon & Rand); Jordan Pond path (L.).

TRICHOCOLEA TOMENTELLA (Ehrh.) Dumort. In moss, Cold Brook (Rand).

SCAPANIACEAE.

DIPLOPHYLLUM ALBICANS (L.) Dumort. On ledges, frequent. Brown's Mt. Notch (Rand); Spring and South End trails, Jordan Mt.; Giant's Slide (L.).

D. TAXIFOLIUM (Wahl.) Dumort. On ledges, less common. West branch of Hadlock Brook (Rand); Brown's Mt. Notch; Western Mt.; Spring Trail, Jordan Mt. (L.).

SCAPANIA CURTA (Mart.) Dumort. On banks. Thunder Hole; Newport Mt. (L.).

S. DENTATA Dumort. Brook-bed on Eagle Lake Carry (L.).

S. IRRIGUA (Nees) Dumort. In boggy places. Baker's I.; shore of Great Pond (L.).

S. NEMOROSA (L.) Dumort. Very common in damp places. Green Mt. Gorge (D. C. Eaton); Beech Mt.; Dog Mt.; Brown's Mt.; Jordan and Sargent Mts.; Western Mt.; near Ripples Pond; Upper Breakneck Pond (Rand); Hunter Brook; Giant's Slide; Sargent Drive (L.).

S. PALUDICOLA Loeske & K. Müll. In bog-holes. Pemetie; Big Cranberry I., near Clubhouse (L.).

S. PALUDOSA K. Müll. Sunken Heath Brook (Rand, as *S. undulata*).

S. UMBROSA (Schrad.) Dumort. Woods, Norwood Cove (Rand, as *S. nemorosa*).

S. UNDULATA (L.) Dumort. Cold Brook; rill near Breakneck Pond; Western Mt.; Somesville; Stanley Brook; Jordan Pond (Rand); Hunter Brook; Ocean Drive (L.).

RADULACEAE.

RADULA COMPLANATA (L.) Dumort. Rocks and trees, common. Intervale Brook (Rand, mixed in *Frullania eboracensis*); Jordan Pond path (L.).

R. OBCONICA Sull. Wet rocks. Spring on Pemetie trail; Stanley Brook (L.).

PORELLACEAE.

PORELLA PLATYPHYLLOIDEA (Schwein.) Sull. Common. Seal Harbor (Redfield, as *P. platyphylla*); Deer Brook (Rand); Hadlock Brook (Rand); Breakneck Road (Rand); Jordan Pond path (L.).

LEJEUNEACEAE.

FRULLANIA ASAGRAYANA Mont. On trees and rocks, common. Eliot's Point (Redfield); wood road to Great Pond, Southwest Harbor; northern foot of Beech Mt. (Rand); Jordan Pond path; on *Thuja*

in woods south of Appalachian Mountain Club camp, Echo Lake (L.).

F. BRITTONIAE Evans. On *Thuja*, Canada Brook (L.).

F. EBORACENSIS Gottsche. Common on trees and rocks. Somerville; Brown's Mt.; Sargent Mt. (Rand); Jordan Pond path (L.).

JUBULA PENNSYLVANICA (Evans) Steph. On wet rocks, Intervale Brook (Rand, as *J. Hutchinsiae* var. *Sullivantii*); Spring on Pemetic trail (L.).

LEJEUNEA CAVIFOLIA (Ehrh.) Lindb. On trees and rocks. Northern end of Beech Mt. (Rand, mixed in *Plagiochila*).

L. PATENS Lindb. On trees and rocks. Spring on Pemetic trail; Green Mt. Gorge; Stanley Brook; on *Thuja* in woods south of Appalachian Mountain Club camp (L.).

ANTHOCEROTACEAE.

ANTHOCEROS LAEVIS L. On damp ground. Seal Harbor; Cadillac Cliff at Sea Cave; Great Pond; roadside near Prettymarsh (L.).

NOTOTHYLAS ORBICULARIS (Schwein.) Sull. Clayey roadside between Town Hill and Indian Point (L.).

HARTFORD, CONNECTICUT.

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RUBIACEAE.

ASPERULA.

A. ODORATA L. Ponkapaug spring in rich woods, Blue Hill Reservation, Randolph (*J. R. Churchill*, June 13, 1908; *J. R. Churchill*, *C. H. Knowlton* & *R. A. Ware*, Aug. 1, 1908). Native in Europe, northern and western Asia.

CEPHALANTHUS.

C. occidentalis L. Swampy places, common throughout.

GALIUM.

G. Aparine L. Woods and open places, especially on the coast.

G. asprellum Michx. Roadsides and moist thickets, common.